



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,360	07/22/2003	David W. Manning		7676

31083 7590 03/29/2005

THOMTE, MAZOUR & NIEBERGALL, L.L.C.  
2120 S. 72ND STREET, SUITE 1111  
OMAHA, NE 68124

EXAMINER

CHIN, RANDALL E

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/624,360	MANNING ET AL.	
	Examiner	Art Unit	
	Randall Chin	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004 and 14 February 2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien '740.

With respect to claim 1, the patent to O'Brien '740 teaches a sewer and drain cleaner 10 (Fig. 1) comprising, a frame 11 and 12, a rotatable drum 28 (col. 3, lines 53-65) mounted on said frame which has a flexible plumber's snake defined by cable coil 50 (Fig. 2) associated therewith, a motor 58 mounted on said frame, said motor having a driven shaft (not labeled but shown in Fig. 1) operatively connected to said drum for rotating the same, and a "control" connected to said motor for controlling the operation thereof which can merely be the on/off switch for activating the motor 58 or the device itself.

The patent to O'Brien '740 discloses all of the recited subject matter with the exception of a motor that is a DC motor and a rechargeable battery mounted on said frame for powering the DC motor. It should be noted here that one of O'Brien's intended functions or goals for the sewer and drain cleaner is to facilitate portability and transport by a user and which can be wheeled or skidded, as the job conditions require, up ramps and stairs, into and out of transport trucks as well as enabling handling of the machine

Art Unit: 1744

through doorways and the like (see col. 1, lines 59-66, col. 4, lines 72-74, and col. 5, lines 26-29, for example). It would have been obvious to one of ordinary skill in the art to have modified O'Brien's cleaner such that the motor is a DC motor to aid in O'Brien's goal of easing portability of the entire device and avoiding the need for long extension cords leading to electrical outlets which would be contrary to O'Brien's stated goal of portability as well as including a rechargeable battery mounted on the frame for powering the DC motor and enabling the battery to be recharged for prolonged usage and extending it's useful life.

As for claim 2, the motor is operatively connected to the drum by a belt drive 60 (Fig. 1).

As for claim 3 reciting that the motor is operatively connected to the drum by a gear drive, one skilled in the art would find it obvious to use a belt or gear arrangement between the motor and drum since they are practically functional equivalents of each other in order to drive the drum. The choice also depends on manufacturing and design requirements.

As for claim 4, one skilled in the art providing for a rechargeable battery would find it obvious to provide for a battery "pack" as such is conventionally known in the rechargeable battery art. A "battery pack" can be easily handled and recharged.

As for claims 5 and 6, the recitations of a "high speed, high torque" motor and "low voltage" DC motor, respectively, are deemed merely relative limitations absent any further specific speed, torque or voltage values. In any case, values for motor speed, torque or voltage are deemed obvious since through an optimization process, one

Art Unit: 1744

skilled in the art would find it obvious to select optimum and appropriate values for the particular function for cleaning drains and sewers.

As for claim 7, one skilled in the art would find it obvious to provide for a motor and voltage control for added safety purposes as well as control the rotational output of the motor depending on the cleaning task at hand.

### ***Conclusion***

3. Applicant's arguments filed 15 November 2004 have been fully considered but they are not persuasive.

Initially, the Examiner would like to clarify the statements made in the first Office Action with respect to the applied art rejection to O'Brien '740. The statement in paragraph 4 of the first Office Action that O'Brien '740 teaches a "battery-powered sewer cleaner" was in error and inadvertently made and has been changed in the above art rejection. The Examiner sincerely regrets any inconvenience.

Notwithstanding, the Examiner has considered Applicant's arguments and Applicant primarily argues that there is no motivation to modify the O'Brien '740 teaching such that the motor is a DC motor and is powered by a rechargeable battery. The Examiner respectfully disagrees with the position of Applicant on the modification of O'Brien '740 by one skilled in the art. The mere fact that O'Brien '740 may not explicitly recite or teach the use of a motor which is a DC motor which utilizes a rechargeable battery does not mean such an arrangement would not be obvious to one skilled in the art. Clearly, there are many electric devices available on the market which could use

Art Unit: 1744

either AC current (household outlets) or DC current (battery powered), for example, electric toothbrushes, power drills, electric shavers, etc. The whole idea behind utilizing a DC powered motor/rechargeable battery arrangement is to ease **portability and usage of these devices, for example, traveling or mere transport a certain distance away from an outlet.** The mere fact that this concept has not yet been applied in the drain or sewer cleaning art does not mean such an arrangement would not be obvious to one skilled in the art. The mere concept of utilizing DC (battery powered) or AC (typical household outlets) is old and well known and the concept of utilizing or switching to either arrangement in the sewer cleaning art is obvious as well as a **reasonable modification** given O'Brien's intended stated goal of easing portability of the entire device. There is no requirement that a motivation to make the modification be expressly articulated. References are evaluated by what they suggest to one of ordinary skill in the art. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In the instant case, one of O'Brien's intended functions or goals for the sewer and drain cleaner is to facilitate **portability and transport** by a user and which can be wheeled or skidded, as the job conditions require, up ramps and stairs, into and out of transport trucks as well as enabling handling of the machine through doorways and the like (see col. 1, lines 59-66, col. 4, lines 72-74, and col. 5, lines 26-29, for example). It is the Examiner's position that it would have been obvious to one of ordinary skill in the art to have modified O'Brien's cleaner such that the motor is a DC motor to aid in O'Brien's goal of easing portability and transport of the entire device and avoiding the need for long extension cords leading to electrical outlets which would be contrary to O'Brien's stated goal of

Art Unit: 1744

portability as well as including a rechargeable battery mounted on the frame for powering the DC motor and enabling the battery to be recharged for prolonged usage and extending it's useful life. Such a modification of O'Brien '740 is deemed **reasonable to one skilled in the art**.

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**5.** Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

Art Unit: 1744

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Robert Warden, can be reached at (571) 272-1281. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Chin



Randall Chin  
Primary Examiner  
Art Unit 1744